




**Product:** [7702NH](#) 

LonWorks, 2PR #22 Sol BC, PO ins, Unsh, LSNH Jkt, 300V, Dca

## Product Description

LonWorks, 2 Pair AWG 22 Bare Copper - Solid, Polyolefin (PO, PE, PP) insulation, Unshielded shielding, LSZH / FRNC jacket , 300V, CPR Dca

## Technical Specifications

### Product Overview

Suitable Applications:	LonWorks, instrumentation, Low capacitance
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### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
22	Solid	BC - Bare Copper	0.64 mm	2

Conductor Count:	4
Total Number of Pairs:	2

#### Insulation

Material	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness
PE - Polyethylene	1.12 mm	0.05 mm	0.23 mm

#### Color Chart

Number	Color
Pair 1	White/Blue & Blue/White
Pair 2	Orange/White & White/Orange

Table Notes:	Ring marking applied
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#### Outer Shield Material

Material
No Shield

#### Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	5.2 mm	0.4 mm	0.5 mm

## Construction and Dimensions

#### Cabling

Description
2 pairs twisted to cable core

## Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR
55 Ohm/km

## Capacitance

Nom. Capacitance Conductor to Conductor
46 pF/m

## Impedance

Frequency [MHz]	Nominal Characteristic Impedance
1 - 20	100 Ohm

## High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss	Nom. NEXT [dB]
0.772 MHz	1.3 dB/100m	
1 MHz	1.5 dB/100m	59 dB
4 MHz	3.1 dB/100m	50 dB
10 MHz	4.9 dB/100m	44 dB
16 MHz	6.3 dB/100m	41 dB
20 MHz	6.9 dB/100m	40 dB

## Current

Element	Max. Recommended Current [A]
Conductor	2.5 Amps per Conductor

## Voltage

Voltage Rating [V]
300 V

## Temperature Range

Operating Temp Range:	-15°C To +80°C
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## Mechanical Characteristics

Bulk Cable Weight:	31.2 kg/km
Max. Pull Tension:	50 N
Min Bend Radius During Installation:	80 mm

## Standards

CPR Euroclass:	Dca-s1,d1,a1
Other Compliance:	BS 7655 section 6.1 table 1, LTS 3

## Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Dca
EU RoHS Compliance Date (yyyy-mm-dd):	1998-01-01

## Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2 and IEC 60332-3-24
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero

## Part Number

### Variants

Item #	Color	Putup Type	Length	EAN
7702NH.00305	White	Reel	305 m	8719605013439
7702NH.00U305	White	UnReel	305 m	8719605013446

## History

Update and Revision:	Revision Number: 0.195 Revision Date: 12-18-2020
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